



BLM Fact Sheet

U.S. Department of the Interior • Bureau of Land Management • Washington, D.C., Office • 1849 C Street N.W. • Washington, D.C.

Oil Shale Fact Sheet

- Oil shale is a fine-grained sedimentary rock containing kerogen, which is organic matter derived from aquatic organisms, from which shale oil may be produced.
- According to the United States Geological Survey, the U.S. holds more than half of the world's oil shale resources, containing more than 2 trillion barrels of oil equivalent, mainly in a 16,000-square mile area in the Green River formation in Colorado, Utah, and Wyoming.
 - Federal lands comprise 72 percent of the total surface of oil shale acreage and 82 percent of the oil shale resources in this area.
- Economic and environmentally acceptable technologies to extract oil from oil shale have not yet been discovered.
 - The Government Accountability Office (GAO) recently determined that several fundamental questions about oil shale technologies remain unanswered, including critical questions about water demands. An October, 2010 [GAO report](#) determined that:
 - *"Oil shale development could have significant impacts on the quality and quantity of water resources, but the magnitude of these impacts is unknown because technologies are years from being commercially proven, the size of a future oil shale industry is uncertain, and knowledge of current water conditions and groundwater flow is limited."*
- To give industry the opportunity to test potential technologies on Federal lands, the BLM, is supporting an Oil Shale Research, Development and Demonstration (R, D & D) program that began with a call for nominations published in the *Federal Register* in 2005.
 - After a review of the 20 nominations received, six tracts (160 acres each), were found to be suitable for R, D&D and were then evaluated under the National Environmental Policy Act (NEPA).
 - On January 1, 2007, five leases were issued in Colorado, to Chevron Shale Oil Company; EGL Resources, Inc., and Shell Frontier Oil & Gas (three leases). In Utah, the Oil Shale Exploration Company was issued a lease with an effective date of July 1, 2007.
- All of the projects in Colorado propose using varying forms of in-situ processing. The Utah project is an ex-situ operation with underground mining and surface retorting of oil shale.
- As part of Secretary Salazar's direction that BLM continue to encourage RD&D for oil shale, BLM published, on November 3, 2009 a Notice in the *Federal Register* calling for nominations for a second round of oil shale RD&D leasing.
 - Three nominations were received - two in Colorado, from ExxonMobil Exploration Company and Natural Soda Holdings, Inc., and one in Utah, from AuraSource, Inc.
 - The nominations were reviewed by an interagency / academic team which found that they all adequately addressed the evaluation criteria and should be advanced.
 - The nominations are currently under NEPA reviews, which are expected to take from 4 to 18 months to complete.

- In November 2008, the previous Administration amended 10 of the BLM's land use plans in Colorado, Utah, and Wyoming to make nearly 2 million acres available for possible commercial-scale oil-shale development, and to expand the acreage available for tar-sands leasing in Utah, where these resources are located. It also issued regulations that fix the royalty rate for oil shale at 5% for the first 5 years of commercial production, rising 1% every year thereafter until the rate reaches a possible maximum of 12.5%.
- On February 15, 2011, Secretary of the Interior Ken Salazar and BLM Director Bob Abbey announced that the BLM will take a fresh look at the November, 2008 commercial oil shale rules and plans issued under the previous Administration and, if necessary, update them based on the latest research and technologies, to account for expected water demands in the arid West, and to ensure they provide a fair return to taxpayers.